



# Utah's High Technology and the Recession

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The heart and soul of the nation's, and Utah's, recession was centered upon high technology. We saw a rapid buildup of new technologies during the 1990's, but overexuberance prevailed and this industry overbuilt. As a result, the entire national recession, Utah included, was centered upon this industry contracting and correcting itself.

This correction resulted in the layoff of workers employed in high-technology industries. Workforce Services has undertaken an analysis of the high-tech industry, profiling this recessionary contraction. This includes profiling the workforce that became unemployed. Some of those findings are summarized hereafter.

The peak of high-technology employment in Utah came in December of 2000. At that time, 67,700 workers were employed in high-technology businesses. By September of 2003, 11,400 workers had been shed, or 17 percent of high-technology's pre-recession workforce. Most of the cuts occurred between December 2000 and September 2002. Since then, high-technology employment has been relatively stable.

The industries comprising our high-technology definition are listed in the box, along with their pre- and post-recession employment levels. Not all high-technology sectors suffered employment contractions during this period. Some even grew. But as a whole, employment contracted.

The largest contractions occurred in computer systems design, computer equipment manufacturing, and semiconductor components manufacturing.

High-technology industries are characterized by many small employers. However, the majority of employment is concentrated in just a few large employers. It was interesting to see from our study that of the high-technology sectors that did experience employment contractions, oftentimes the bulk of the losses were centered upon one or just a few large employers who dominated the sector. Another interesting tidbit is that most companies remained in business. Few went out of business.

At the height of the economic expansion — December 2000 — the state's metropolitan corridor, from Weber to Utah counties, housed 88 percent of the state's high-technology employment. By September of 2003, this percentage had slipped to 86 percent. Whether 88 percent or 86 percent, these are high percentages. They compare against overall Utah employment being an 80 percent concentration in the metropolitan corridor.

Workforce Services' study focused on at least one large employer within each of the industrial sectors that experienced employment contractions. Each of these employers had layoffs of 100 workers or more, and the total number of laid off workers tracked was 1,800, or 16 percent of the total 11,400 workers laid off. The study's highlights are:

- 29 percent (524) did not show up as earning any wages in Utah after their layoff (suggesting they left the labor force, did not find a job, found employment out of state, or were transferred out of state).
- Conversely, 71 percent (1,294) earned wages in Utah after their layoff.

The following statistics make reference to only the 71 percent who showed up with additional Utah wages:

- 72 percent of those found re-employment within three months of being laid off.
- 74 percent found re-employment outside of the high-technology industry.
- 54 percent were re-employed with jobs that paid more than their previous high-technology jobs.
- Only 9 percent found re-employment within the same high-technology sector.
- 9 percent found re-employment through a temporary employment service agency.
- 39 percent filed for unemployment insurance.

## CHANGE IN HIGH-TECHNOLOGY EMPLOYMENT IN UTAH

| <u>Industry Description</u>                   | <u>Utah Employment</u> |                       | <u>Numeric Change</u> |
|---|------------------------|-----------------------|-----------------------|
|   | <u>December 2000</u>   | <u>September 2003</u> |                       |
| In-Vitro Diagnostic Substance                 | 15                     | 24                    | 9                     |
| Optical Instrument and Lens Manufacturing     | 187                    | 156                   | -31                   |
| Computer and Peripheral Equipment             | 3,942                  | 1,168                 | -2,774                |
| Communications Equipment                      | 2,398                  | 2,459                 | 61                    |
| Semiconductor and Electronic Components       | 4,618                  | 2,896                 | -1,722                |
| Navigational, Measuring and Electromedical    | 3,313                  | 3,177                 | -136                  |
| Carbon and Graphite Product Manufacturing     | 371                    | 316                   | -55                   |
| Aerospace Products and Parts and Mfg.         | 7,427                  | 6,273                 | -1,154                |
| Medical Equipment Supplies                    | 7,430                  | 7,524                 | 94                    |
| Software                                      | 5,697                  | 4,602                 | -1,095                |
| Motion Picture and Video Production           | 3,003                  | 2,530                 | -473                  |
| Postproduction and Other Related Industries   | 45                     | 26                    | -19                   |
| Wireless Telecommunications Carriers          | 1,459                  | 706                   | -753                  |
| Satellite Telecommunications                  | 91                     | 73                    | -18                   |
| Other Telecommunications                      | 82                     | 67                    | -15                   |
| Internet Service Providers                    | 3,779                  | 3,024                 | -755                  |
| Engineering Services                          | 5,710                  | 5,833                 | 123                   |
| Testing Laboratories                          | 1,187                  | 1,193                 | 6                     |
| Computer Systems Design                       | 13,901                 | 10,656                | -3,245                |
| R&D in Physical Engineering and Life Sciences | 3,060                  | 3,623                 | 563                   |
|   | 67,715                 | 56,326                | -11,389               |